

Serial No.: 10/623,137

-2-

Art Unit: 1723

Amendments to the Specification

Please replace paragraph the paragraph beginning at page 11, line 1 of this application (corresponding to paragraph [0035] in Publication No. 2004/0100860) with the following replacement paragraph:

Upon completion of this circulation step, the chemical input valves are opened to allow dosing of desired chemicals to blend in sequence. The input of chemicals is such that each stream is allowed to enter into the blend vessel at full flow initially. As a chemical stream enters into the vessel and blends with the initial bulk solvent, the chemical concentration monitor begins to register change as an output value. This signal rises with time, as the result of chemical addition. As the concentration of the desired chemical to be blended increases, the processing signal may control the rate at which the desired chemical enters by adjusting the variable control valve in two ways, which are visually depicted in FIG. 15 and FIG. 16. FIG. 15 depicts a process, where instead of a variable control valve, a regular two-way actuating valve is controlled through a processor (e.g., a processor in the controlling platform) in a time setting. The actuation of the valve is rapidly opened and closed, dispensing small quantities of desired chemical to enter the vessel undergoing agitation. The rate at which the stepped process operates may be controlled by the increasing concentration value registered by the in-line concentration instrument. The stepped sequence allows for small portions of desired chemical to dispense until the setpoint is achieved and the process completes. FIG. 16 depicts a process using a variable control valve, where the incoming stream of desired chemical is rate controlled over time. As the monitor registers the increase in chemical concentration, the variable control valve reduces the rate at which the desired chemical enters into the blend vessel. This continuous process regulates the flow in a manner that the endpoint is attained in a faster manner than in the stepped version. Both styles of process control may be regulated by the rate at which the instrumentation registers a change and communicates this value to the controller, signaling a change in the valve operation.

774582.1